

At page 5, line 10, after "comprises", replace "and" with --an--.

**In the Claims:**

Please amend claims 10, 12, 15, 16 and 18, as follows:

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A1

10. (Amended) The optical fibre emulator of claim 5, further comprising a digital decoder disposed between said serial-to-parallel bit converter and said input port of said digital shift register so as to convert a transmission code of a first length to a data code of a second, shorter length prior to application of said digital data to said shift register, and a digital encoder disposed between said output port of said shift register and said optical signal modulator so as to convert said data code of said second length to said transmission code of said first length prior to application of said digital data to said optical signal modulator.

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A2

12. (Amended) A method for emulating an optical fibre, comprising:

receiving an input digitally-encoded optical signal and producing a

digitally-encoded electrical signal whose code is based on the code of said

input digitally-encoded optical signal;

delaying said digital data for a predetermined time; and

receiving said digital data after said predetermined time and

producing a delayed digitally-encoded optical signal